THE PURPOSE AND METHOD OF FOREST RESERVATION.

BY HENRY MICHELSEN.

MR. JAMES P. KIMBALL writes in the NORTH AMERICAN REVIEW for August on "Aggressive Forest Reservation." The allegations of the article, while partially correct, are made from the standpoint of an opponent of reserves; and, while the intent of the writer is undoubtedly consistent with good citizenship, it may be pointed out that the grievances complained of, though by no means imaginary, are not so serious as to overbalance the good done by the preservation of forests in high altitudes.

The high character of the author and his intimate knowledge of Western affairs, entitle his opinions to great respect. The purpose of this article is to discuss possible errors of statement, and to correct impressions caused by complaints of a strictly local nature.

The laws under which forest reserves have been established are the following:

The Act of March 3, 1891, (26 Stat., 1095): Section 24 thereof authorizes the President of the United States to establish public forest reserves.

The Act of June 4, 1897, (30 Stat., 34-36), provides for the administration of forest reserves created under section 24 of the act of March 3, 1891.

The Act of February 28, 1899, (30 Stat., 908), authorizes the Secretary of the Interior to rent or lease suitable spaces and portions of ground near, or adjacent to, mineral, medicinal, or other springs within public forest reserves.

The Act of March 3, 1899, (30 Stat., 1095), "Sundry Civil;" the Act of February 9, 1900, (31 Stat., 21), "Urgent Deficiency;" and the Act of June 6, 1900, (31 Stat., 614) "Sundry Civil," contain the following provision:

"Provided Further, That forest agents, superintendents, supervisors, and all other persons employed in connection with the administration

and protection of forest reservations shall, in all ways that are practicable, aid in the enforcement of the laws of the State or Territory in which said forest reservation is situated in relation to the protection of fish and game."

The Act of March 3, 1899, (30 Stat., 1097), "Sundry Civil," provides, "That hereafter all standard, meander, township, and section lines of the public land surveys shall, as heretofore, be established under the direction and supervision of the Commissioner of the General Land Office, whether the lands to be surveyed are within or without reservations, except that where the exterior boundaries of public forest reservations are required to be coincident with standard, township, or section lines such boundaries may, if not previously established in the ordinary course of the public land surveys, be established and marked under the supervision of the Director of the United States Geological Survey whenever necessary to complete the survey of such exterior boundaries."

The Act of March 3, 1899, (30 Stat., 1233), "Deficiency," provides, "That in the form provided by existing law the Secretary of the Interior may file and approve surveys and plans of any right of way for a wagon road, railroad, or other highway over and across any forest reservation or reservoir site when in his judgment the public interests will not be injuriously affected thereby."

The Act of May 5, 1900, (31 Stat., 169), amends act of February 24, 1897, (29 Stat., 594), entitled "An act to prevent forest fires on the public domain."

The Act of June 6, 1900, (31 Stat., 614), provides, "That all selections of land made in lieu of a tract covered by an unperfected *bona fide* claim, or by a patent, included within a public forest reservation, as provided in the act of June fourth, eighteen hundred and ninety-seven, entitled 'An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-eight, and for other purposes,' shall be confined to vacant surveyed non-mineral public lands which are subject to homestead entry not exceeding in area the tract covered by such claim or patent: Provided, That nothing herein contained shall be construed to affect the rights of those who, previous to October first, nineteen hundred, shall have delivered to the United States deeds for lands within forest reservations and make application for specific tracts of lands in lieu thereof."

The Act of June 6, 1900, (31 Stat., 661), amends certain provisions in the Act of June 4, 1897, (30 Stat., 35), respecting sale of forest reserve timber.

With the agriculturalists of the West forest preservation is not a cult, but a matter of dire necessity. The very origin of the law proves this. But for the efforts of the United States Government to retain at least a part of the forest at the headwaters of the rivers, irrigation would have been a thing of the

past. The scantily timbered highland areas of the Rocky Mountains cannot bear the wasteful lumbering, followed by fires, which has been practised until the greater part of this territory has become a mountain desert; and cities, as well as farm lands, see their water supplies cut off in the early summer of each succeeding year, the irrigation seasons becoming shorter as each lustre rolls by, and the supply of drinking water for the growing cities at the foot of the Sierra becoming more scant as the needs of their populations grow greater.

It may be affirmed by interested persons that the denudation of the Rocky Mountains would in no wise decrease the natural storage capacity of the high altitudes. Mr. Kimball speaks of "ranges at elevations too high for entry or improvement, but perennially renewed under unfailing precipitation." It may be true of the western slope of the Teton Range of Wyoming that precipitation is unfailing, but this is not so as regards the eastern slopes of the mountains of Colorado and New Mexico, where the snow-fall is becoming more and more intermittent, and the peaks often are bare in March or April. An abrogation of the forest reserve laws, which would permit a denudation of the mountains below timber line, thus destroying the natural storage-reservoirs, would not be hailed with pleasure by the farmers of any of the Western States, but would be most strenuously resisted.

The purpose of the law as defined in the Act of June 4, 1897, is "to improve and protect the forest within the reservation; or to improve favorable conditions of water-flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States." No one familiar with conditions in the arid West may say that such a law was not needed. Nor can it be contended that the nation, in which the title to these lands is vested, was not right in segregating therefrom certain portions for the very great benefit of those who have put homes into the heart of the desert, and who have founded great cities and mighty commonwealths where the nomadic tribes of the aborigines experienced difficulty in their search for a scanty support. Having set apart these mountainous forest lands for these beneficent purposes, the nation was further bound to entrust the execution of its laws, under proper safeguards, to the constitutional adviser of the President, to whose care the administration of Interior affairs has been committed from the very inception of the gov-

ernment. That the reserve laws have in all cases been executed in accordance with the benevolent intent of the statute is not claimed. Mistakes have been more or less frequent. There have been changes in officials, as there have been changes in the Federal administration, but the result as a whole has been to enlarge the irrigated area upon the plains formerly arid, to establish new agricultural industries (notably that of the sugar beet), to aid the sheep-grower in providing feeding establishments for many millions of his lambs, and to enable the cattle-grower to winter his stock by enormously enhancing the crop of native and cultivated grasses.

As an offset to these benefits, we have the necessity, arising from the very nature of the case, of meeting the complaints of those who have settled within the areas set apart for reserves. It is true that the nation offers, in the Act of June 4, 1897, that in cases in which a tract covered by an unperfected *bona fide* claim, or by a patent, is included within the limits of a public forest reservation, the settler or owner may relinquish the tract to the Government and select in lieu thereof a tract of vacant land open for settlement, not exceeding in area the tract covered by his claim or patent. It is also true that, under this clause of the act, the settlers making the exchange have, in nearly all cases, obtained for their government scrip a much larger price than they would have received under a private sale. But this does not obviate the fact that, in order to establish a forest reserve, it is necessary to maintain the tree-growth upon the area thus set apart, and that, if claims are relinquished, the lands will probably be reafforested. Now, the extent of these relinquishments is much commented upon. In the Plum Creek Reserve, which embraces 180,000 acres, the relinquishments to date have been 9,420 acres, approximately five per cent. In the South Platte Reserve, which contains 683,520 acres, 18,520 acres have been relinquished, or barely two and seven-tenths per cent. It is submitted that the sufferings of so small a minority, which is well paid for its holdings, as is universally acknowledged, are not so great as to necessitate a change either in the law or in the methods of its administration.

Egress and ingress of actual settlers residing within the boundaries of forest reserves, or transit across the same to and from their properties or their homes, are guaranteed by the law. It is

also lawful for any person to prospect, locate and develop the mineral resources of the reserves, provided always that the necessary rules and regulations are complied with. And, since mining requires the use of timber, each locator may utilize such timber as he finds upon his own claim, and even obtain more under the proper application and permit. That companies are barred from the free use of timber within the reserves is a matter of necessity; were it otherwise, there would be but little timber preserved.

All water within the forest reserves may be used for domestic, milling, mining or irrigation purposes under the laws of the State wherein such reservations are situated, or under the laws of the United States and the rules and regulations established thereunder.

Stock grazing is allowed, under permits emanating from the Secretary of the Interior. The rules under which these permits are being granted have proven so beneficial, that a very pronounced difference is observable in the stand of the grasses on a properly regulated forest reserve and those on the public lands outside of it; and it has been acknowledged, time and again, that, if ever the public grazing domain is to be made useful to its fullest extent, it must be done upon the basis of the principles followed out in the management of the forest reserves. It may be permissible to detail very briefly the practice followed.

At the end of every grazing season, the stand of the grasses and the general condition of the range are ascertained. In Colorado, the matter is then discussed at public meetings between the stock-growers and the government officials. Where the growth of grasses is thin and scant, the number of head is reduced; where an increase of numbers pastured is admissible, an increase is allowed. The range is then divided in such a manner as to give preference in the following order: *(a.)* Stock of the reserve residents; *(b.)* stock of persons owning farms or ranches in the reserve, but not residing thereon; *(c.)* stock belonging in the vicinity of the reserve, known as "neighboring stock"; *(d.)* stock coming from a considerable distance from the reserve.

The aim being to allow each settler in the reserve a sufficiency of winter range and to keep the outsiders from intruding upon it, much bickering occurs at these meetings; but the result is, on the whole, that each man obtains his home range, which he may again receive during the succeeding year, as it is easier to

retain the cattle upon the lands to which the animals have become accustomed. It is thus made the interest of each owner to improve, as much as possible, the stand of his grasses. Arrangements are also made, under the laws of the State and the rules of the County and State Associations, for the return of the stray stock to the proper owners. These meetings have been found to be of the greatest value to all interested, and have done more to keep the peace between cattle men and sheep men than is at present understood. And they have obviated a good deal of talk about an arbitrary management of forest reserves. Of course, so long as self-interest shall actuate mankind, there will be disputes between herd owners as to range area. From the days of the Patriarchs to the present time, there have been difficulties to be overcome, boundaries, and rights to springs and water courses to be adjusted; but, upon the whole, it is properly claimed that the system adopted is fair, and that, if carried out without too much rigidity, it must succeed in settling, in an equitable and perfectly legal manner, the disputes which naturally arise.

Sheep and goats have been excluded from many reserves, because of the damage done by these animals to the young growth. Sheep men, of course, deny the justice of the stand taken, or the fact that any damage does occur. But the appearance of any sheep country demonstrates the fact that, wherever the herds are allowed to roam, the hillsides do become bare, and that the reproduction of timber ceases. In Colorado, a practical method appears to have been found of avoiding an unjust discrimination. Flock owners usually keep their herds within their own territory until the lambing season is over; they then drive them through the reserve to the ranges upon public lands above timber line, where the grasses are very nutritious, and where may be found the natural home of the wild sheep. It is thought that in this manner the highlands may be utilized without detriment to the interests of the country at large; it is certain that nothing has been heard lately of range wars between cattle men and sheep men.

As to game preservation, the law prescribes that forest officers of the United States must enforce the State game laws. This is supposed to mean that if a violation of the game or fish laws comes to the notice of a United States ranger, he must report the fact to the nearest State game warden. Forest officers have no

power to make arrests, and it is much to be hoped that no such power may ever be conferred upon them. A forester has too much to do to trouble about game, and the hunting season usually brings into the mountains such a number of campers as to make the watching of their fires a grievous burden to him. In the Eastern Colorado reserves, rangers do not carry firearms; the land is considered the heritage of the people at large, to be exploited under the proper regulations for the benefit of those entitled to them, the few game animals being entirely under the care of the State laws.

Roads and trails are being made, under the rules laid down by law, wherever necessity arises. State and county roads traverse the Colorado reserves from end to end. While illegal cutting of timber is prohibited, fifty per cent. more free-use permits have been issued than have been taken advantage of. Mr. Kimball says that "to the accepted theories of forest protection and the avowed purposes of forest reservation, no popular objection is seriously opposed." It is sought, here, to demonstrate that an effort, at any rate, is being made to carry out the law in letter and in spirit, and that there is little occasion in fact for the anticipations of evil in which Mr. Kimball indulges. In Colorado, the Federal and State authorities work in harmony, and there has been no friction. The State has endeavored to make its regulations conform to the forest rules of the Interior Department, and that action, being voluntary, certainly indicates that there is no absolute harshness in these forest rules. And the Agricultural Department is now engaged in important work to determine the value of the State timber lands. It would not be very difficult to establish similar relations elsewhere.

If the forest reserve regulations are to be embodied in concrete form in specific legislation, it is thought that but little change can be made in these rules as they now stand.

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